SECTION C

C-1 NSN/ITEM DESCRIPTION

PCR-C-0002 CHICKEN BREAST STRIPS WITH CHUNKY SALSA, PACKAGED IN A FLEXIBLE POUCH, SHELF STABLE

Each component is consumed by combat personnel under worldwide environmental extremes as part of an operational ration, which is the sole source of nutritional intake. It is essential that this item be produced in accordance with good commercial practice to attain high standards of appearance, odor, flavor, and texture so that high levels of troop acceptance are achieved.

C-2 PERFORMANCE REQUIREMENTS

- A. $\underline{\text{First article}}$. A sample shall be subjected to first article inspection in accordance with the tests and inspections of Section E of this Performance-based Contract Requirements.
- B. <u>Commercial sterility</u>. The packaged food shall be processed until commercially sterile.
- C. Shelf life. The packaged food shall meet the minimum shelf life requirement of 36 months at $80^{\circ}F$.

D. Appearance.

- (1) Chicken breast strips. The chicken breast strips may be of random length and shall be typically produced by equipment with settings that result in strips 5/8 inch in width. The cooked chicken breast strips shall be free of skin, cartilage, coarse connective tissue, section of tendons or ligaments, and discolored meat. The chicken breast strips shall have a characteristic cooked, chicken breast color.
- (2) $\underline{\text{General}}$. There shall be no bone or bone fragment in the packaged food.
- (3) <u>Salsa</u>. The thick and chunky tomato salsa shall be a red to reddish brown color with visible chunks of tomato, onion, sweet bell peppers (green and red), chili and/or Jalapeno peppers and visible flecks of herbs and spices.

E. Odor and flavor.

- (1) $\underline{\text{Chicken breast strips}}$. The chicken breast strips shall have a mild poultry odor and flavor.
- (2) $\underline{\text{Salsa}}$. The odor and flavor of the thick and chunky salsa shall be a balanced $\underline{\text{blend}}$ of Mexican style seasonings with no excess bitterness or acidity.
- (3) $\underline{\text{Foreign}}$. The packaged food shall be free from foreign odors and flavors such as, but not limited to, burnt, scorched, rancid, sour, or stale.

SECTION C CONTINUED

F. Texture.

(1) $\underline{\text{Chicken breast strips}}$. The chicken breast strips shall be moist and tender.

(2) Salsa. The salsa shall be thick and chunky.

G. Weight.

(1) Net weight. The average net weight shall be not less than 8.0 ounces. No individual pouch shall contain less than 7.5 ounces.

(2) <u>Drained weight</u>.

- a. <u>Chicken breast strips</u>. The average drained weight of the chicken breast strips shall be not less than 2.0 ounces. The drained weight of the chicken breast strips in an individual pouch shall be not less than 1.8 ounces.
- * b. <u>Chunky vegetable pieces</u>. The average drained weight of the chunky vegetable pieces shall be not less than 1.7 ounces. The drained weight of the chunky vegetable pieces in an individual pouch shall be not less than 1.5 ounces.
- H. <u>Palatability</u>. The finished product shall be equal to or better than the approved first article, when applicable, or other approved model in palatability and overall appearance.

I. Nutrient content.

- (1) $\underline{\text{Protein content}}$. The protein content shall be not less than 8.1 percent.
- (2) $\underline{\text{Fat content}}$. The fat content shall be not greater than 4.0 percent.
- (3) Salt content. The salt content shall be not greater than 1.3 percent.

C-3 MISCELLANEOUS INFORMATION

A. <u>Ingredients and formulation</u>. Ingredients and formulation percentages may be as follows:

(1)	Salsa:	Ingredients	Percent by weight
		Tomatoes, canned, diced	91.18
		Water	2.91
		Starch, modified	1.60
		Oil, Vegetable	1.40
		Sugar, white, granulated	0.72
		Onions, chopped, dehydrated	0.54
		Salt	0.48

SECTION C CONTINUED

<u>Ingredients</u>	Percent by weight
Pepper, black, ground	0.18
Vinegar, white, distilled	0.16
Worcestershire sauce	0.10
Jalapeno pepper powder	0.07
Flavor, cilantro 1/	0.06
Cumin, ground	0.06

1/ Artificial cilantro flavor 5-11256, #36372, S-73916, Bush Boake Allen Inc., was used in the development of this product.

(2)	Product:	Ingredients		Percent by weight
	·	Salsa		63.0
		Chicken breast strips	1/	37.0

 $\underline{1}/$ Natural chicken breast tenders, unbreaded, premarinated, ready-to-cook, were used in the development of this product.

SECTION D

D-1 PACKAGING

A. Product shall be filled into pouches and the pouches shall be filled into cartons. Both shall meet the requirements of Section 3 and Figures 1 and 2 of MIL-PRF-44073. Verification testing and inspection of pouch and carton conformance to the requirements shall be by the testing and inspections of Section 4 of MIL-PRF-44073 and the Quality Assurance Provisions of Section E of this Performance-based Contract Requirements.

D-2 LABELING

- A. <u>Pouches</u>. Each pouch shall be clearly printed or stamped, in a manner that does not damage the pouch, with permanent black ink or any other contrasting color, which is free of carcinogenic elements or ingredients. To avoid erroneous marking of pouches, the product name, lot number and filling equipment number shall be applied prior to thermal processing. All other marking may be applied before or after thermal processing.
- (1) Product name (1/8 to 7/16 inch block letters). Commonly used abbreviations may be used when authorized by the inspection agency.
 - (2) Pouch code includes: 1/
 Lot Number
 Filling equipment identification number
 Official establishment number (for example, EST-38) (applicable to class 1 and 3 only)
 Retort identification number
 Retort cook number

SECTION D CONTINUED

1/2 Shall be code marked as follows: The lot number shall be expressed as a four digit Julian code. The first digit shall indicate the year of production and the next three digits shall indicate the day of the year (Example, July 1, 1997 would be coded as 7182). The Julian code shall represent the day the product was packaged into the pouch and processed. Sub-lotting (when used) shall be represented by an alpha character immediately following the four digit Julian code. Following the four digit Julian code and the alpha character (when used), the other required code information shall be printed in the sequence as listed above. For food products that do not require an establishment number, the Julian code shall be preceded by three capital letters, which represent the packer's name.

B. Cartons.

(1) The cartons shall be clearly printed on the largest panel with permanent black ink as follows:

Product name (7/32 to 9/32 inch block letters). Ingredients. Net weight. Name and address of packer. Code (same as pouch code, see pouches). 1/2/2 USDA approval stamp for the packers plant (applicable to meat and poultry items only).

- 1/ Code may be ink printed or embossed on the outside of any other panel except the largest panels of the carton.
 - 2/ Official establishment number not required in carton code.
- (2) The carton shall display the "Nutrition Facts" label in accordance with the Nutrition Labeling and Education Act (NLEA) and all applicable FDA/USDA regulations.

D-3 PACKING

A. Packing for shipment to ration assembler. Seventy-two pouches (of the same product) in cartons shall be packed flat or on edge in a snug-fitting fiberboard shipping container conforming to style RSC, type CF, class domestic, grade 200 of ASTM D 5118, Standard Practice for Fabrication of Fiberboard Shipping Boxes. Each container shall be securely closed in accordance with ASTM D 1974, Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Shipping Containers.

D-4 MARKING

A. <u>Shipping containers</u>. Shipping containers shall be marked in accordance with DPSC Form 3556, Marking Instructions for Shipping Cases, Sacks and Palletized/Containerized Loads of Perishable and Semiperishable Subsistence.

PCR-C-0002 Page 5 of 8 March 5, 1999

SECTION E INSPECTION AND ACCEPTANCE

E-6 QUALITY ASSURANCE PROVISIONS

Definitions.

- (1) $\underline{\text{Critical defect}}$. A critical defect is a defect that judgment and experience $\underline{\text{indicate would}}$ result in hazardous or unsafe conditions for individuals using, maintaining, or depending on the item; or a defect that judgment and experience indicate is likely to prevent the performance of the major end item, i.e., the consumption of the ration.
- (2) <u>Major defect</u>. A major defect is a defect, other than critical, that is likely to result in failure, or to reduce materially the usability of the unit of product for its intended purpose.
- (3) $\underline{\text{Minor defect}}$. A minor defect is a defect that is not likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

Quality Assurance Provisions.

The following quality assurance criteria, utilizing ANSI/ASQC Z1.4-1993, Sampling Procedures and Tables for Inspection by Attributes, are recommended.

- A. <u>Classification of inspections</u>. The inspection requirements specified herein are classified as follows:
- (1) $\frac{\text{First article inspection}}{\text{with the provisions of this Performance-based Contract Requirements}}$ and evaluated for overall appearance and palatability. Any failure to conform to the performance requirements or any appearance or palatability failure shall be cause for rejection of the first article.
- (2) <u>Conformance inspection</u>. Conformance inspection shall include the product examination and the methods of inspection cited in this section.
- * B. Product examination. The finished product shall be examined for compliance with the performance requirements specified in Section C of this Performance-based Contract Requirements utilizing the double sampling plans indicated in ANSI/ASQC Z1.4 1993. The lot size shall be expressed in pouches. The sample unit shall be the contents of one pouch. The inspection level shall be S-3 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 1.5 for major defects and 4.0 for minor defects. Defects and defect classifications are listed in Table I. For drained weight inspection, a separate set of pouches shall be selected from the lot using the same sampling criteria as above. The pouches shall be immersed in 140°F to 190°F water for 10 minutes prior to the drained weight inspection.

SECTION E CONTINUED

TABLE I. Product defects 1/ 2/ 3/

		TABLE 1. Product defects 1/ 2/ 3/
Category		Defect
<u>Major</u>	<u>Minor</u>	Appearance
101		Bone or bone fragment measuring more than 0.3 inch in any dimension
102		Color not characteristic of cooked chicken breast
	201	Total weight of skin, cartilage, coarse connective tissue, section of tendons or ligaments, and discolored meat is more than 0.35 ounces
	202	Salsa not red to reddish brown with visible chunks of vegetables and flecks of herbs and spices
		Odor and flavor
103		Chicken breast strips do not possess a mild poultry odor or flavor
104		Salsa does not possess a well balanced blend of Mexican style seasonings
		<u>Texture</u>
	203	Chicken breast strips not moist or not tender
	204	Salsa not thick or not chunky
		Weight
	205	Net weight of an individual pouch less than 7.5 ounces $\frac{4}{}$
	206	Drained weight of chicken breast strips in an individual pouch less than 1.8 ounces $\underline{5}/$
	209	Drained weight of chunky vegetable pieces in an individual pouch less than 1.5 ounces $\underline{6}/$

 $[\]underline{1}/$ Presence of any foreign odors and flavors such as, but not limited to burnt, scorched, rancid, sour, or stale shall be cause for rejection of the lot.

²/ Finished product not equal to or better than the approved first article, when applicable, or other approved model in palatability and overall appearance shall be cause for rejection of the lot.

 $[\]underline{3}/$ Machine size requirement for chicken breast strips shall be verified by certificate of conformance.

PCR-C-0002 Page 7 of 8 May 14, 1999

SECTION E CONTINUED

 $\underline{4}/$ If the sample average net weight is less than 8.0 ounces, the lot shall be rejected.

- 5/ If the sample average drained weight of chicken breast strips is less than 2.0 ounces, the lot shall be rejected.
- $\underline{6}$ / If the sample average drained weight of chunky vegetable pieces is less than 1.7 ounces, the lot shall be rejected.

C. Methods of inspection.

- (1) Commercial sterility. Testing for commercial sterility shall be in accordance with MIL-PRF-44073E.
- * (2) Shelf life. The contractor shall provide a certificate of conformance that the product has a 3 year shelf life when stored at $80^{\circ}F$. Government verification may include storage for 6 months at $100^{\circ}F$ or 36 months at $80^{\circ}F$. Upon completion of either storage period, the product will be subjected to a sensory evaluation panel for appearance and palatability and must receive an overall score of 5 or higher based on a 9 point hedonic scale to be considered acceptable.
- (3) $\underline{\text{Net weight}}$. The net weight of the filled and sealed pouches shall be determined by weighing each sample unit on a suitable scale tared with a representative empty pouch. Results shall be reported to the nearest 0.1 ounce.
- (4) Drained weight. The contents of the pouch shall be poured into a flat-bottom container. A minimum of three times the volume of the pouch of $180^{\circ}F$ to $190^{\circ}F$ water shall be added to the container so as to cover the contents. The contents and water shall be gently agitated so as to liquefy rendered fat and remove the sauce. The contents shall then be poured into a US Standard No. 7 sieve in a manner that will distribute the product over the sieve. The sieve area shall be such that the distributed product does not completely cover all the openings of the sieve. The sieve shall be tilted at approximately a 45° angle and allowed to drain for 2 minutes before determining the drained weight by subtracting the sieve tare weight from the gross weight. The drained weight shall be reported to the nearest 0.1 ounce.
- (5) <u>Nutrient content</u>. The sample to be analyzed shall be a composite of eight filled and sealed pouches which have been selected at random from the lot. The composted sample shall be prepared and analyzed for protein content, fat content, and salt content in accordance with the following methods of the Official Methods of Analysis of AOAC International:

Test	Method Number
Protein	988.05
Fat	960.39, 985.15
Salt	935.47

Test results shall be reported to the nearest 0.1 percent. Any result not conforming to the requirements specified in Section C of this Performance-based Contract Requirements shall be cause for rejection of the lot.

PCR-C-0002 Page 8 of 8 September 22, 1997

SECTION J REFERENCE DOCUMENTS

DPSC FORM

DPSC FORM 3556 Marking Instructions for Shipping Cases, Sacks and Palletized/Containerized Loads of Perishable and Semiperishable Subsistence, May 96

FEDERAL SPECIFICATION

FED-STD-595 - Colors Used in Government Procurement

MILITARY SPECIFICATION

MIL-PRF-44073 - Packaging of Food in Flexible Pouches

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- D 1974 Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Shipping Containers
- D 3985 Oxygen Gas Transmission Rate Through Plastic Film and Sheeting Using a Coulometric Sensor
- D 5118 Standard Practice for Fabrication of Fiberboard Shipping
 Boxes
- F 372 Standard Test Method for Water Vapor Transmission of Flexible Barrier Materials Using an Infrared Detection Technique
- ANSI/ASQCZ1.4-1993 Sampling Procedures and Tables for Inspection by Attributes
- AOAC INTERNATIONAL Official Methods of Analysis of the AOAC International

AMSSB-RCF-FN (Valvano/4259) 2000

6 November

TO: DSCP-HSL (Woloszyn/4435)

Subject: Document changes; PCR-C-0002 Chicken Breast Strips with Chunky Salsa, Packaged in a Flexible Pouch, Shelf Stable; Protein Requirement Deletion (DDC01-012)

- 1. Based on recent inquiries, the U.S. Army Soldier and Biological Chemical Command, Soldier Systems Center (SBCCOM) and COL Applewhite, Chief Dietician of the Army, have determined that, on a case-by-case basis, the protein requirement in some operational ration entrees could be eliminated. In these instances, reliance on drained weight and other nutritional/analytical requirements was acceptable.
- 2. SBCCOM requests that DSCP implement the following changes to the subject document for all MRE XXI and pending procurements until the document is formally amended or revised:

In section C-2, para I(Nutrient content): Delete "(1) protein content..." entirely.

In section E-6, para C (5) Nutrient content, lines 3 and 7: delete references to "protein content" and "protein 988.05" accordingly.

DONALD A. HAMLIN
Team Leader
Food Engineering Services Team
Combat Feeding Program

TO: DSCP-HRAA (LeCollier/3625)

Subject: (ES02-105) Technical Inquiry; Various MRE Documents (listing below); Clarify Carton labeling information

Ref: Quality Summit Mar 13, 2002, Industry One on One Sessions.

- 1. Based on discussions at referenced meeting, the U.S. Army Soldier and Biological Chemical Command, Soldier Systems Center (SBCCOM) has decided to clarify the carton labeling information since the requirement as written has been misinterpreted.
- 2. SBCCOM requests that DSCP implement the following change to the listed subject documents for all current, pending and future procurements until the documents are formally amended or revised:

In Section D, D-2 Labeling, B Cartons: Delete Footnote 1 entirely and insert:

 $^{\text{n}}\underline{1}/$ Code may be ink printed on any outside carton panel. Code may be embossed on any outside carton panel except the largest panels of the carton."

3. The affected MRE entrée related documents are as follows:

Clam Chowder, New England style, Pouch	PCR-C-045	25 Oct 01
Pork Rib, Boneless, Imitation, Pouch	PCR-P-028	25 Oct 01
Fruits, Wet Pack, Pouch	PCR-F-002A	24 Oct 01
Vegetable Manicotti, Pouch	PCR-V-002	24 Oct 01
Beef Roast w/Vegetables, Pouch	PCR-B-035	24 Oct 01
Chili and Macaroni, Pouch	PCR-C-027	15 Nov 00
Beef Stew, Pouch	PCR-B-020	15 Nov 00
Beef Ravioli in Meat Sauce, Pouch	PCR-B-021	15 Nov 00
Beef w/Mushrooms in Sauce, Pouch	PCR-B-022	15 Nov 00
Beef Patty, Grilled, Pouch	PCR-B-029	15 Nov 00
Beefsteak, Grilled w/Mushroom Gravy, Po	ouch PCR-B-030	15 Nov 00
Pork Chop, Jamaican, Pouch	PCR-P-012	15 Nov 00
Seafood Tortellini, Pouch	PCR-S-011	15 Nov 00
Turkey Breast, in Gravy w/Potatoes, Pot	uch PCR-T-004	15 Nov 00
Country Captain Chicken, Pouch	PCR-C-019A	31 Jul 00
Jambalaya w/Ham & shrimp, Pouch	PCR-J-001	30 Sep 99
Beef Enchilada in Sauce, Pouch	PCR-B-010(1)	30 Sep 99
Potatoes, Mashed, Pouch	PCR-P-011	30 Sep 99
Black Bean and Rice Burrito, Pouch	PCR-B-0002	17 Dec 97
Spaghetti w/Meat Sauce, Pouch	PCR-S-0002	5 Nov 97
Pork Chow Mein, Pouch	PCR-P-0002	5 Nov 97
Chicken and Rice, Pouch	PCR-C-0005	5 Nov 97
Chicken Stew, Pouch	PCR-C-0006	5 Nov 97
Beef Frankfurters, Pouch	PCR-B-0003	5 Nov 97
Pasta w/Vegetables in Cheese Sauce, Por	uch PCR-P-0001	22 Sep 97
Noodles, Buttered, Pouch	PCR-N-0001	22 Sep 97

Meatloaf w/Gravy, Pouch	PCR-M-0001	22 Sep 97
Chicken Breast w/Salsa, Pouch	PCR-C-0002	22 Sep 97
Chicken Breast in Thai Sauce, Pouch	PCR-C-0003	22 Sep 97
Beef in Teriyaki Sauce w/Vegetables, Pouch	PCR-B-0001	22 Sep 97
Apple Slices in Spice Sauce, Pouch	PCR-A-0001	4 Apr 97

- 4. Several MRE related component documents, i.e. breads, cakes, cookies, do not require a carton.
- 5. Several MRE entrée related documents from the Oct 1998 time frame did not contain the specific labeling of pouches and cartons inclusively. They referenced MIL-PRF-44073 in the Section D requirements.

Page 2 ES02-105

6. Therefore, SBCCOM requests that DSCP implement the following change to the Quality Assurance Provisions and Packaging Requirements for MIL-PRF-44073E Packaging of Foods in Flexible Pouches for all current and pending procurements until the document is formally amended or revised:

In III, A, 1 Labeling and marking, b, Cartons: Delete Footnote 1 entirely and insert:

 $^{\infty}\underline{1}/$ Code may be ink printed on any outside carton panel. Code may be embossed on any outside carton panel except the largest panels of the carton."

DONALD A. HAMLIN
Team Leader
Food Engineering Services Team
Combat Feeding Program

R Valvano

CF: NSC:
Alyward
Friel
Hamlin
Hill
Konrady A.
Konrady M.
Moody
Richards
Sherman
Trottier

Valvano

CF: DSCP & SVCs:

Anthony
Arthur
Beward
Charette
Ferrante
Galligan
Hoffman
Lowry
Malason
Richardson H.
Salerno